

# Concealment of Programmable Nano-RFID Chips in Glycerin Suspension (Liquid Hand Soap) to Conceal Digitized Information to Be Smuggled Out of Target Nation, Reduces Risk of Compromise of Intelligence Officers

28 July 2022

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## Introduction

Although electronic devices are decreasing in size and are easy to visually occlude, the practice of using electronics-sniffing dogs has threatened to compromise members of our intelligence community. Officers tasked with smuggling documents out of country need to be "raid-ready" as much of the time as possible and to store pilfered information in a way that would cause it to be overlooked by adversaries.

One exciting possibility to better protect these Officers is the practice of suspending a great many programmable nanoscale RFID chips in a suspension of glycerin, disguised as normal, ordinary liquid hand soap or shampoo. Information can be uploaded to these chips using specially modified radio transmitters in seemingly ordinary smart phones. Intelligence officers can use their phone to take pictures of documents, upload them to the chips hidden within the liquid, and then securely erase the images from the phone.

When the batch of information is ready for export, rather than mailing a bottle of travel-sized shampoo out of the target country (potentially suspicious) the shampoo would then be poured over a letter envelope so the chips suspended in the liquid embed themselves in the envelope. The envelope could then be addressed and sent back to a cover address anywhere in the world. Original copies of smuggled documents could be disposed of in the usual way. The glycerin would conceal the odor of the nanotechnology, stymieing any search conducted by dogs.

## Conclusion

Counterintelligence investigations must, going forward, include the close examination of all items that could be used to hide nanoscale RFID such as liquid soaps. This may not be as straightforward as it seems since these specialized nodes could be tailored to release their contents and reveal their presence (at least electromagnetically) only when a system of dynamic resonance permits it. The system could be configured to require a specific combination of frequencies to be emitted by the secure phones in order to trigger a set of secondary frequencies in select RFID chips. Only with all necessary frequencies triggered would the signal generated be powerful enough to measure. Trying to bombard the travel soaps with all frequencies at once would squelch the signals emitted, making detection impossible. For detection, microscopic visual exam would be required. For extraction and decoding, low-powered frequency combination testing would be required to prove espionage and identify the source of the leaks.